

## **NRC NEWS**

## U.S. NUCLEAR REGULATORY COMMISSION

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## NRC AMENDS COMBUSTIBLE GAS CONTROL STANDARDS FOR NUCLEAR POWER REACTORS

The Nuclear Regulatory Commission is amending its regulations on control of combustible gases in nuclear power reactor containment to reflect information from the agency's research program and significant advances in NRC's understanding of the gases' risks to nuclear plants.

The final rule stems from the Commission's ongoing efforts to increase use of risk information in its regulations. It will impact current and future nuclear power reactor licensees by relaxing or eliminating the requirements for some equipment presently used to control combustible combinations of gases (hydrogen and oxygen) for nuclear power plant containment following a loss-of-coolant accident which each reactor is designed to withstand. In addition, the Commission is relaxing the requirements for oxygen and hydrogen monitoring equipment to reflect their low risk while maintaining the current level of safety.

Over the past 20 years, the NRC has sponsored a research program to improve its understanding of combustible gas generation and behavior in nuclear power reactors during accidents. The studies showed that the hydrogen release from a design-basis loss-of-coolant accident was not risk-significant because it would not lead to early containment failure. Therefore, some hydrogen monitoring and control equipment requirements can be relaxed without compromising safety. Sufficient capability remains to mitigate longer term challenges to containment integrity.

Along with the rulemaking, the NRC is also issuing a revised regulatory guide and revised standard review plan. A model safety evaluation and associated changes to standard technical specifications will be published shortly.

A proposed rule on this subject was published in the *Federal Register* for public comment on August 2, 2002. The Commission received several letters from licensees, vendors, utility groups and private citizens. Although all comments were considered, no significant changes were made in the final rule.

The final rule will be published in an upcoming edition of the Federal Register.